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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,080	05/15/2001	Kevin Collins	10006721-1	2538

7590 03/21/2007  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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BATURAY, ALICIA

ART UNIT	PAPER NUMBER
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2155

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/858,080		COLLINS ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Alicia Baturay		2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is in response to the amendment filed 18 January 2007.
2. Claims 1, 5, 6 and 8 were amended.
3. Claims 1-21 are pending in this Office Action.

### ***Response to Amendment***

4. The rejection is respectfully maintained as set forth in the last Office Action mailed on 20 October 2006. Applicant's arguments with respect to claims 1-21 have been fully considered but they are not persuasive and the old rejection maintained.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Courtright, II et al. (U.S. 6,157,963).

7. With respect to claim 1, Courtright teaches a method for managing transactions at a network storage device comprising:

Receiving an incoming transaction at the network storage device (Courtright, col. 4, lines 52-58); and assigning a priority to the incoming transaction relative to other incoming transactions at the network storage device based at least in part on a usage policy (Courtright, col. 4, lines 58-67); and overriding the priority with a requested priority included in the incoming transaction (Courtright, col. 8, lines 24-42).

8. With respect to claim 2, Courtright teaches the invention described in claim 1, including a method further comprising receiving the usage policy at a network storage device (Courtright, col. 8, lines 31-42), and where the network storage device is a NAS device (Courtright, col. 1, lines 13-19).

9. With respect to claim 3, Courtright teaches the invention described in claim 1, including a method further comprising:

Reading meta data from the transaction; and comparing the meta data to a number of rules defined in the usage policy, where assigning the priority to the transaction is based on at least part of the meta data satisfying at least one condition of the number of rules (Courtright, col. 4, lines 52-58).

10. With respect to claim 4, Courtright teaches the invention described in claim 1, including ordering the transaction among other transactions in a queue at the network storage device (Courtright, col. 8, line 63 – col. 9, line 3).
11. With respect to claim 5, Courtright teaches a method for managing transactions at plural network storage devices, comprising:

Generating a usage policy at a server for the network storage devices (Courtright, col. 8, lines 31-36); distributing the usage policy from the server across a network to the network storage devices for prioritizing a plurality of incoming transactions received at the network storage devices relative to one another; and providing updates to the usage policy from the server to the network storage devices (Courtright, col. 8, lines 36-42).
12. With respect to claim 6, Courtright teaches the invention described in claim 5, including a method further comprising identifying the network storage devices on the network (Courtright, col. 1, lines 13-19), and where the network storage devices are NAS devices (Courtright, col. 1, lines 13-19).
13. With respect to claim 7, Courtright teaches the invention described in claim 5, including a method where the usage policy comprises a number of rules, each including meta data and a corresponding priority (Courtright, col. 4, lines 52-67).

14. With respect to claim 8, Courtright teaches an apparatus for managing a plurality of incoming transactions at a network storage device, comprising:

Computer readable storage medium at the network storage device; a usage policy stored on the computer readable medium; and computer readable program code residing in the computer readable storage medium, comprising program code for prioritizing the plurality of incoming transactions relative to one another based on the usage policy (Courtright, col. 4, lines 52-67); where the prioritizing in the usage policy uses at least two conditions based on (1) user logon, (2) originating application, (3) user-requested priority, and (4) purpose for accessing the network storage device (Courtright, col. 8, lines 24-30).

15. With respect to claim 12, Courtright teaches the invention described in claim 8, including an apparatus where the usage policy comprises a number of default rules (Courtright, col. 6, line 1 – col. 7, line 3).

16. With respect to claim 13, Courtright teaches an apparatus for managing a plurality of incoming and outgoing transactions at a network storage device, comprising:

Computer readable storage medium (Courtright, col. 3, lines 55-61); and computer readable program code residing in the storage medium, including program code for defining a usage policy for prioritizing the plurality of incoming and outgoing transactions relative to one another (Courtright, col. 5, lines 7-30).

17. With respect to claim 14, Courtright teaches the invention described in claim 13, where the computer readable program code resides at a policy management server and further comprises program code for distributing the usage policy to the network storage device (Courtright, col. 8, lines 31-42).
18. Claims 9-11, 15, 16 and 18-21 do not teach or define any new limitations above claims 1-3 and 13 and therefore are rejected for similar reasons.

***Response to Arguments***

19. Applicant's arguments filed 18 January 2007 have been fully considered, but they are not persuasive for the reasons set forth below.
20. ***Applicant Argues:*** Nowhere does Courtright teach or even suggest overriding priorities with a requested priority included in an incoming transaction.

***In Response:*** The examiner respectfully submits that Courtright teaches overriding the priority with a requested priority included in the incoming transaction (I/O requests may be prioritized by...storage object priority...the user may change the priorities assigned to the...storage objects...prior to I/O processing – see Courtright, col. 8, lines 24-42). This renders the rejection proper, and thus the rejection stands.

21. ***Applicant Argues:*** Claim 5 recites “providing updates to said usage policy from said server to said network storage devices.”

***In Response:*** The examiner respectfully submits that Courtright teaches generating a usage policy at a server for the network storage devices (the user of the system may change the priority schemes and/or algorithms used by the system – see Courtright, col. 8, lines 31-36); distributing the usage policy from the server across a network to the network storage devices for prioritizing a plurality of incoming transactions received at the network storage



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devices relative to one another; and providing updates to the usage policy from the server to the network storage devices (the priority values may be downloaded to the...storage controller...through a network environment – see Courtright, col. 8, lines 36-42). This renders the rejection proper, and thus the rejection stands.

22. ***Applicant Argues:*** Nowhere does Courtright teach where the prioritizing in the usage policy uses at least two conditions based on (1) user logon, (2) originating application, (3) user-requested priority, and (4) purpose for accessing the network storage device.

***In Response:*** The examiner respectfully submits that Courtright teaches where the prioritizing in the usage policy (I/O requests may be prioritized by) uses at least two conditions based on (1) user logon (storage user priority), (2) originating application, (3) user-requested priority, and (4) purpose for accessing the network storage device (job priority – see Courtright, col. 8, lines 24-30). This renders the rejection proper, and thus the rejection stands.

23. ***Applicant Argues:*** Courtright never mentions how priority is determined for outgoing I/O requests.

***In Response:*** The examiner respectfully submits that prioritizing the plurality of incoming (two or more storage users have the same or similar priority values, I/O requests from those storage users may be placed in a single memory queue configured to receive I/O requests from all storage users having a particular priority or a priority value falling within a particular range...processor then retrieves I/O requests from memory queues in accordance with a predetermined scheduling algorithm (e.g., highest priority first). Processor then processes the I/O operation for the selected I/O request with the appropriate storage object(s), and returns the results of the I/O operation back to the requesting storage user) and outgoing transactions relative to one another (after processor executes an I/O operation from one of the memory queues, processor preferably changes the priority value assigned to that memory queue – see Courtright, col. 5, lines 7-30). Incoming transactions are prioritized a queue based on other transactions that have a similar priority values. If a transaction from this queue has been processed recently, another transaction that has the same priority in that queue would be processed later due to the change in priority of the queue, and thus this second transaction would have a different outgoing priority than that of the first transaction. This renders the rejection proper, and thus the rejection stands.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay  
March 16, 2007



SALEH NAJAR  
SUPERVISORY PATENT EXAMINER